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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/529,994	03/31/2005	Ralf Boss	ZAHFRI P730US	5332
20210	7590	11/13/2006		
DAVIS & BUJOLD, P.L.L.C. 112 PLEASANT STREET CONCORD, NH 03301			EXAMINER PHAN, HAU VAN	
			ART UNIT 3618	PAPER NUMBER

DATE MAILED: 11/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/529,994	<b>Applicant(s)</b> BOSS ET AL.	
	<b>Examiner</b> Hau V. Phan	<b>Art Unit</b> 3618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 31 March 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 8-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 8-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some    \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>3/31/2005</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Priority***

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Information Disclosure Statement***

2. The information disclosure statement (IDS) submitted on 3/31/2005 has been considered.

### ***Claim Objections***

3. Claim 13 is objected to because of the following informalities: The term "liking" and the term "914)" should be change to – "linking" and "(14)". Appropriate correction is required.

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. **Claims 1-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weiss (DE 4,434,237) in view of Morikawa (5,751,081).**

Weiss in figure 1, discloses a vehicle equipped with individual electric wheel drive trains, particularly multi-axle driven off-road vehicles, comprising one vehicle body and at least one left and one right drive wheels (10) each of which is coordinated with one drive train having at least one electric prime mover (22). The prime mover being situated radially outside the drive wheel at least partly in the installation space occupied by the drive wheel. Weiss also discloses one left linking transmission, which is being provided for operative connection of a left prime mover with the left drive wheel and for operative connection of a right prime mover with the right drive wheel. Weiss also discloses one right linking transmission, which is situated upon the side of drive wheel and the prime mover facing a vehicle center. Weiss also discloses transmission shafts, which by means of a joint are connected with the output of the connecting transmission and one shiftable clutch (52) that is provided with which the left drive wheel and the opposite right drive wheel can selectively be operatively coupled together. Weiss fails to show a housing of which is rigidly connected with the vehicle body and is being provided between an output of each of the left and the right linking transmission and the left and the right drive wheels.

Morikawa in figure 3, teaches a reduction gear device for a electric vehicle comprising first and second motors (2), first and second transmission (3) and a housing that is rigidly connected with a vehicle body and the transmission is provided between an output of the first and second motors. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the vehicle of Weiss with the reduction device as taught by Nakamura et al. in order to reduce an overall sized of the

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transmission.

Regarding claim 9, Morikawa teaches the left linking transmission and the right linking transmission having a common housing.

Regarding claim 10, Weiss discloses the left linking transmission and the right linking transmission each having one separate housing.

Regarding claim 11, Weiss discloses the shiftable clutch, which is situated in only one of the separate transmission housings.

Regarding claim 12, Weiss discloses the shiftable clutch that is situated between a first transmission element of the left linking transmission non-rotatably connected with the prime mover and a second transmission element of the right linking transmission non-rotatably connected with the right prime mover.

Regarding claim 13, Weiss discloses the shiftable clutch that is situated between a first transmission element of the left linking transmission non-rotatably connected with the left drive wheel and a second transmission element of the right linking transmission non-rotatably connected with the right drive wheel.

Regarding claim 14, Weiss discloses the shiftable clutch that is situated between an intermediate wheel of the left linking transmission and an intermediate wheel of the right linking transmission.

**Conclusion**

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Weiss discloses a vehicle hybrid wheel drive system; Nowick discloses an electric vehicle.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hau V. Phan whose telephone number is 571-272-6696. The examiner can normally be reached on 7:30AM-4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Ellis can be reached on 571-272-6914. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Hau V Phan  
Primary Examiner  
Art Unit 3618



11/2/06